

REMARKS

Applicant thanks the Examiner for a thorough examination of the present application, but respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. At the time of the outstanding Office Action, claims 1, 3, 5, 6, 8, 10, and 12 were pending. Of these claims, claims 1, 5, 6, and 10 have been amended. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Thus, claims 1, 3, 5, 6, 8, 10, and 12 are now pending for examination in this application.

In the final Office Action of August 28, 2008, the Examiner maintained the rejection of claims 1, 5, 6, and 10 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,638,371 to Raychaudhuri et al. (Raychaudhuri) in view of U.S. Patent No. 5,978,380 to Kobayashi et al. (Kobayashi).¹ In addition, the Examiner maintained the rejection of claims 3, 8, and 12 as being unpatentable Raychaudhuri in view of Kobayashi and further in view of U.S. Patent No. 6,754,182 to Aznar et al. (Aznar). Applicant respectfully traverses these rejections for at least the reasons set forth below.

In the Amendment and Reply filed by Applicant on May 12, 2008, Applicant argued in detail why neither Raychaudhuri nor Kobayashi teaches or suggests instructing an ATM channel based on the *state* of a wireless channel. More particularly, Applicant argued that setting a common signal channel capacity *based on a measured traffic volume* (as discussed in Kobayashi) is not the same as instructing an ATM channel based on the *state* of a wireless channel (as recited in the independent claims). In response to this argument, the Examiner asserted that they can be considered to be the same “since in both instances the state of the channel determines the bandwidth capacity.” (*See*, page 3 of Office Action). Although Applicant does not agree with the Examiner’s assertion, in the interest of advancing prosecution, and to more particularly describe aspects of the present application, Applicant

¹ Applicant notes that, in the present Office Action, the Examiner refers to U.S. Patent No. 5,978,380 as “Kazutoshi” – apparently referring to the first name of one of the inventors. However, in the previous Office Action, the Examiner referred to U.S. Patent No. 5,978,380 as “Kobayashi.” For clarity and consistency purposes, Applicant is denoting U.S. Patent No. 5,978,380 as “Kobayashi,” since this was the name used in the previous Office Action and in the previous Amendment and Reply.

has amended each of independent claims 1, 5, 6, and 10 to recite that “the state information of the wireless channel is associated with a data rate of the wireless channel.” (*See*, page 3 of final Office Action). As such, each independent claim more particularly describes that the state information is associated with a data rate of a channel. Applicant respectfully submits that this amendment distinguishes the present claims from Kobayashi inasmuch as setting a common signal channel capacity *based on a measured traffic volume* (as discussed in Kobayashi) is not the same as instructing an ATM channel based on the *state* of a wireless channel, wherein the state information of the wireless channel is associated with a *data rate* of the wireless channel. In particular, Applicant submits that a volume cannot be considered to be the same as a rate. Therefore, Applicant submits that Kobayashi does not read on independent claims 1, 5, 6, and 10 as amended.

Raychaudhuri does not cure the deficiencies associated with Kobayashi because, as correctly recognized by the Examiner, “Raychaudhur [sic] is silent with regards to a channel control unit to regulate ATM channel bandwidth or of a channel QoS management unit that gives instructions to the channel control unit based on the state information of the wireless channel.” (*See*, page 4 of final Office Action). Therefore, for at least the above reasons, Applicant submits that neither Kobayashi nor Raychaudhuri, considered alone and in combination, teach or suggest instructing an ATM channel based on the state of a wireless channel, wherein the state information of the wireless channel is associated with a data rate of the wireless channel, as required by independent claims 1, 5, 6, and 10 as amended.

In addition to this deficiency, Applicant submits that Kobayashi and Raychaudhuri also fail to teach another claim element required by independent claims 1, 5, 6, and 10 as amended. In the Amendment and Reply filed by Applicant on May 12, 2008, Applicant argued in detail why neither Raychaudhuri nor Kobayashi teaches or suggests instructing the channel control unit *to set priority* to each data received from the plurality of mobile apparatuses *according to a state of each wireless channel* through which the data in question is transmitted and received and conduct relay through said ATM channel based on the priority in question. In response to this argument, the Examiner asserted that “since the data received on the channel are from end users such as the from [sic] wireless devices as taught by Raychaudhur [sic], then the limitation of ... can be interpreted to distinguish voice signal data

given higher priority than common signal data, and therefore teaches of setting a priority on the state of each wireless channel.” (*See*, page 3 of Office Action). In other words, the Examiner essentially asserted that the teaching in Kobayashi related to giving speech channels priority over the common signal channels reads on the claim element directed to setting the priority to each data received according to the state of each wireless device. Applicant respectfully disagrees with this assertion. However, in the interest of compact prosecution, Applicant has further amended the independent claims to more particularly describe aspects of the present application. In particular, Applicant has amended each independent claim to recite that “a higher priority is set to each data received if the state of the wireless channel is below a predetermined threshold and a lower priority is set to each data received if the state of the wireless channel is above a predetermined threshold.” Accordingly, each claim now requires the state to be compared to a predetermined threshold and a particular priority to be set based on this comparison, wherein the priority is set in an inverse relationship to the state.

Kobayashi does not read on this claim element because Kobayashi merely teaches that the speech channels have priority over the common signal channels with regard to the remaining segment of interoffice channel capacity. (*See, e.g.*, col. 6, line 63 – col. 7 line 6). Since such a discussion has no relation to setting a priority based on the comparison of a status to a predetermined threshold, Applicant submits that Kobayashi does not teach or even suggest such a feature.

Furthermore, Applicant submits that it would not have been obvious for one of ordinary skill in the art to modify Kobayashi to include such a feature, since Kobayashi is only concerned with whether or not the signal is from a “speech channel” of a “common signal channel.” Kobayashi is not concerned with whether or not the state of each data received is above or below a threshold. This point is made clear by Kobayashi statement that “[w]hen the speech channels and the common signal channels compete for the remaining segment, the speech channels have priority to use the remaining segment.” (Col. 7, lines 1-4). Thus, modifying Kobayashi to include the claimed feature would provide no additional benefit and would only further complicate the design, thereby adding more points of failure, reducing efficiency, and increasing production costs for no obvious benefit.

Raychaudhuri does not cure the deficiencies associated with Kobayashi because, as correctly recognized by the Examiner, "Raychaudhur [sic] is silent with regards to a channel control unit to regulate ATM channel bandwidth or of a channel QoS management unit that gives instructions to the channel control unit based on the state information of the wireless channel." (See, page 4 of final Office Action). Therefore, for at least the above reasons, Applicant submits that neither Kobayashi nor Raychaudhuri, considered alone and in combination, teach or suggest that a higher priority is set to each data received if the state of the wireless channel is below a predetermined threshold and a lower priority is set to each data received if the state of the wireless channel is above a predetermined threshold, as required by independent claims 1, 5, 6, and 10 as amended.

Because none of the references cited by the Examiner, either separately or in combination with each other, teaches or suggests all of the features recited in independent claim 1, 5, 6, and 10, Applicant submits that independent claims 1, 5, 6, and 10 are patentable over these cited references. Furthermore, because dependent claims 3, 8, and 12 are each directly or indirectly dependent upon independent claims 1, 6, and 10, Applicant submits that each of these claims are allowable for at least the same reasons discussed above, in addition to their own reasons which Applicant reserves the right to argue at a later time if necessary.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith,

Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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